

REMARKS

Claims 1-14 are all the claims pending in the application.

Drawings

Applicant thanks the Examiner for acknowledging and accepting the drawings filed on September 16, 2005.

Claim Rejections -- 35 U.S.C. § 102

Claims 13 and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,115,807 to Pless. Applicant respectfully traverses these rejections.

Claim 13 recites an electric stimulator comprising “an analyzer, operable to detect a waveform of the electric pulse which has been actually output from the electrodes.” The Examiner asserts that this limitation is met by virtue of the teachings of Pless that following the defibrillation shock, a microprocessor calculates and displays the delivered energy and the amount of resistance by measuring the residual voltage on the capacitor. However, measuring the residual voltage across the high voltage capacitor is not tantamount to detecting a waveform of a pulse that has actually been output. Pless, at col. 11, line 61 to col. 12, line 12, specifically describes how the voltage is measured. The residual voltage left on the capacitor is fed to a comparator 266. The microprocessor then varies an output of DAC 264, which is also fed into the comparator 266, and adjusts the output of the DAC 264 until the least significant bit of the code to the DAC is enough to toggle the output of the comparator. This final code of the DAC represents the residual capacitor voltage.

This procedure of Pless does not meet the claim limitation for at least two reasons. First, the value fed into the comparator from the capacitor is not a waveform of the electric pulse which was actually output. Rather, it is the value of the voltage left on the capacitor after the pulse fires. Second, a waveform of the pulse which was actually output is not analyzed. Rather, the measured residual value is analyzed. The value of the residual voltage is used, along with the initial voltage on the capacitor, to compute the energy and resistance delivered. Thus, for at least these two reasons, claim 13 is patentably distinguished from Pless.

Since claim 14 presents substantially similar limitations to those of claim 13, claim 14 is also patentably distinguished over Pless for at least the reasons given above. Therefore, Applicant respectfully requests that the rejections be withdrawn.

Claims 13 and 14 also stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,328,808 to Charbonnier. Applicant respectfully traverses these rejections.

Claim 13 recites an analyzer operable to detect a “waveform of the electric pulse which has been actually output from the electrodes.” The Examiner asserts that Charbonnier teaches this limitation by virtue of its peak detector 43 of Fig. 2. However, peak detector 43 only outputs the peak current which is supplied to the electrodes.

By contrast, referring to Fig. 5 of the present invention, the circuit in block 4 provides a resistance in parallel to the resistance of the living body 113, 113a. This arrangement enables the detection of the *waveform* of the pulse which has been actually output from the electrodes 112a, 112b. In other words, what is actually detected is voltage between the left end of coil 110 and

the lower end of the resistance 111 (between the electrodes). This feature is thus not shown by Charbonnier.

Therefore, claim 13 is patentably distinguished over Charbonnier for at least this reason. Moreover, since claim 14 presents substantially similar limitations to those of claim 13, claim 14 is also patentably distinguished over Charbonnier for at least the reasons given above. Therefore, and Applicant respectfully requests that the rejections be withdrawn.

Claim Rejections -- 35 U.S.C. § 103

Claims 1-2, 4-5, 7, 9-10, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pless in view of Japanese Patent Publication No. 54-112589A ("JP '589A").

Claim 1 recites an analyzer operable "to analyze a parameter of the waveform" of the electric pulse which has been actually output from the electrodes. For the reasons discussed above, Pless does not show detecting a waveform of the electric pulse which has been actually output. It follows that Pless therefore cannot analyze a parameter of that waveform, since the waveform of the electric pulse which has been actually output from the electrodes is never detected.

JP '589A does not cure this deficiency of Pless. JP '589A shows a defibrillator which displays an output voltage waveform. It does not show analyzing parameters of that waveform. Therefore, claim 1 is patentable over the cited references for at least this reason.

Moreover, since claim 2 recites a limitation substantially similar to that of claim 1, claim 2 is also patentable at least for the reasons discussed above, and that the rest of the claims are patentable based on their dependencies. Applicant therefore respectfully requests that the rejections be withdrawn.

Claims 3 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pless in view of JP '589A in further view of U.S. Patent No. 5,713,937 to Nappholz.

Nappholz concerns programmers used to initialize, monitor and modify the operation of implanted pacemakers and to a programmer having an improved graphic interface. Nappholz does not cure the deficiencies of Pless and JP '589A because Nappholz does not show an analyzer. Claims 3 and 8 are patentable over this combination, and therefore Applicant respectfully requests that the rejections be withdrawn.

Claims 6 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pless in view of JP '589A in further view of U.S. Patent No. 5,249,573 to Fincke.

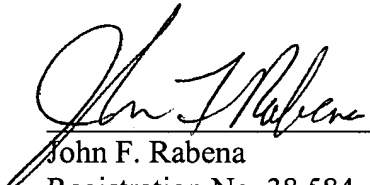
Fincke relates generally to providing a test discharge across a shorting bar. Fincke, thus, does not cure the deficiencies of Pless and JP '589A because Fincke does not concern detecting and analyzing a waveform of a pulse which has actually been output from the electrodes. Thus, claims 6 and 9 are patentable over this combination, and Applicant respectfully requests that the rejections be withdrawn.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


John F. Rabena
Registration No. 38,584

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: January 13, 2006